CLINICAL EVALUATION OF DEXAMETHASONE VS. METHYLPREDNISOLONE FOR REDUCING POSTOPERATIVE INFLAMMATORY SEQUELAE FOLLOWING THIRD MOLAR SURGERY

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A randomized prospective double-blind study was conducted to determine the efficacy of sub-mucosal local infiltration of dexamethasone vs. methylprednisolone in reducing postoperative pain, swelling and trismus after surgical removal of impacted mandibular third molars. Ninety patients were included in the study and were randomly divided into three groups. Each group consisted of 30 patients for which the first and second groups were given 4 mg of dexamethasone and 125 mg of methylprednisolone, respectively, at 5-10 min. preoperatively; the third group served as control. Duration of facial swelling was evaluated subjectively by the patients themselves. Severity of postoperative pain was quantified by counting the number of analgesics taken by the patients during and after surgery (six subsequent days). Trismus was determined by measuring the maximum incisal opening before surgery and on the seventh day, postoperatively.

Results showed that duration of facial swelling was almost the same in the three test groups. During surgery, the methylprednisolone group showed a significantly lesser pain than the other two groups; the dexamethasone group showed less marked pain than the control group. Additionally, patients who had taken steroids had a marked increase in the incisal opening postoperatively over the control group. Trismus was significantly reduced in the methylprednisolone group as compared to the dexamethasone group. It is concluded that preoperative local infiltration of methylprednisolone and dexamethasone significantly reduced postoperative pain and trismus after surgical removal of mandibular third molars. A 125 mg methylprednisolone is more effective in reducing postoperative inflammatory sequelae than a 4 mg dexamethasone.